

REMARKS/ARGUMENTS

Claim Amendments

The claims have been amended.

Claim 1 has been cancelled.

5 Claim 2 has been amended to change its dependency from Claim 1 to Claim 3.

Claim 3 has been amended to include all of the limitations of Claim 1, from which it depended. Thus, the scope of Claim 3 remains unchanged.

Claims 9 and 14 have been amended to change their dependency from Claim 1 to Claim 3.

10 Claim 18 has been cancelled.

Claim 19 has been amended to change its dependency from Claim 18 to Claim 20.

Claim 20 has been amended to include all of the limitation of Claim 18, from which it depended. Thus, the scope of Claim 20 remains unchanged.

15 Claims 26 and 31 have been amended to change their dependency from Claim 18 to Claim 20.

New Claims 35 - 44 have been added. Support for new Claims 35-44 can be found throughout the specification. Specifically, support can be found in FIGs. 2 and 13 and on pages 8-24 of the specification.

20 **Claim Rejections – 35 USC 102**

Claim 3

In section 1 of the Office Action, the Examiner rejected Claims 1-34 under 35 USC 102(b) as being anticipated by US Patent No. 5,617,085 to Tsutsumi et al., herein referred to as the “Tsutsumi patent.” Specifically, referring to page 3, the Examiner rejected Claim 3. The Examiner stated that the Tsutsumi patent discloses wherein the time-based sequence of data frames (see col. 16, line 5 of the Tsutsumi patent) includes a plurality of data elements including at least one horizontal edge (referring to the outline of the car in Fig. 12a); and wherein each horizontal edge is identified based on a plurality of pixels having substantially similar electromagnetic radiation response across a plurality of substantially horizontally aligned pixels (col. 14, lines 50-52); and wherein the image signal processor extracts horizontal edges, from the time based sequence of

data frames, in the form of edge pixels (the edge of the car is extracted as shown in Fig. 12a); and wherein the edge pixels are projected in each row of the data frames, to get a horizontal edge projection in the sequence of data frames (the histogram shown in Fig. 12a is the claimed “horizontal edge projection”); and wherein each horizontal edge 5 projection may be tracked in time based on the horizontal edge projection’s sequential appearance in the data frame (the histogram of the vehicle shown in Fig. 12a is tracked by comparing the outputs from the histogram computing means 563 and the comparative reference value setting means 564, col. 15, lines 65-67). The Applicants respectfully disagree with the characterizations and conclusions drawn by the Examiner.

10 In order to establish a *prima facie* case of anticipation, the Examiner must set forth an argument that provides (1) a single reference (2) that teaches or enables (3) each of the claimed elements (as arranged in the claim) (4) either expressly or inherently and (5) as interpreted by one of ordinary skill in the art. All of these factors must be present, or a case of anticipation is not met. Thus, “[a]nticipation requires the disclosure in a 15 single prior art reference of each element of the claim under consideration.” *W.L. Gore & Associates v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983). The Applicants submit that the Tsutsumi patent does not teach, disclose or suggest all of the elements claimed in Claim 3.

Claim 3 claims, in part, “wherein each horizontal edge is identified based on a 20 plurality of pixels having substantially similar electromagnetic radiation response across a plurality of substantially horizontally aligned pixels.” The Examiner pointed to col. 14, lines 50-52 as teaching this element. Col. 14, lines 50-52 of the Tsutsumi patent state “FIG. 12(a) shows the relation between the outline image and position of the forward vehicle detected by the laser radar when the optional axes are coincident.” The 25 Applicants do not understand how the Examiner is interpreting this sentence to teach “wherein each horizontal edge is identified based on a plurality of pixels having substantially similar electromagnetic radiation response across a plurality of substantially horizontally aligned pixels,” as is claimed in Claim 3. If the Examiner continues to assert that this sentence teaches this element of Claim 3, the Applicants respectfully request the 30 Examiner explain how he is interpreting this sentence of the Tsutsumi patent so that the Applicants may respond. In light of the foregoing, the Applicants submit that the

Tsutsumi patent does not teach, disclose or suggest “wherein each horizontal edge is identified based on a plurality of pixels having substantially similar electromagnetic radiation response across a plurality of substantially horizontally aligned pixels,” as is claimed in Claim 3.

5 *Claim 5*

On page 5 of the Office Action, the Examiner rejected Claim 5. The Examiner stated that the Tsutsumi patent teaches wherein a horizontal edge projection tracks are sorted based on the duration of image inputs that the horizontal edge projection track records. The Examiner does not reference where, specifically, in the Tsutsumi patent this limitation can be found. The Applicants did a word search of the Tsutsumi patent and did not find the word “sort” anywhere in the patent. The Applicants do not agree with the Examiner that the Tsutsumi patent teaches this limitation, but without further information from the Examiner as to why he believes that the Tsutsumi patent teaches this limitation, the Applicants cannot develop a more specific argument to rebut the Examiner’s assertion. Therefore, if the Examiner maintains that the Tsutsumi patent teaches this limitation found in Claim 5, the Applicants respectfully request that the Examiner point out where in the Tsutsumi patent he believes this limitation is taught, disclosed or suggested. The Applicants submit that this limitation is not taught disclosed or suggested in the prior art, thus Claim 5 contains patentable subject matter.

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Claim 20

On page 7 of the office action, the Examiner rejected Claim 20 by stating that all the limitations were addressed in Claim 3. The Applicants submit that Claim 20 is patentable for the same reasons given above regarding Claim 3.

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Claim 22

On page 8 of the office action, the Examiner rejected Claim 22 by stating that all the limitations were addressed in Claim 5. The Applicants submit that Claim 22 is patentable for the same reasons given above regarding Claim 5.

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Claims 4-17, 21-36

Claims 4-17 and 21-36 are claims that are ultimately dependent upon Claim 1 or Claim 20. For the reasons given above, the Applicants submit that Claims 1 and 20 are patentable over the cited prior art. Thus, the Applicants submit that Claims 4-17 and 21-
5 36 are patentable over the cited prior art at least through their dependence upon an allowable base claim.

Patentability of New Claims

New Claims 35-44 have been added. The Applicants submit that all the
10 limitations in Claims 34-44 are not taught by the cited prior art. Thus, the Applicants submit that the new claims are patentable in light of the art cited.

Concluding Remarks:

In view of the foregoing, it is respectfully submitted that all now pending claims 2-17 and 19-44 are in allowable condition. Reconsideration is respectfully requested.

5 Accordingly, early allowance and issuance of this application is respectfully requested. Should the Examiner have any questions regarding this response or need any additional information, please contact the undersigned at (310) 589-8158.

The Commissioner is authorized to charge any additional fees which may be required or credit overpayment to deposit account no. 50-2691. In particular, if this 10 response is not timely filed, the Commissioner is authorized to treat this response as including a petition to extend the time period pursuant to 37 CFR 1.136(a) requesting an extension of time of the number of months necessary to make this response timely filed and the petition fee due in connection therewith may be charged to deposit account no. 50-2691.

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Respectfully submitted,

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8/01/2004
Date


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